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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,027	08/04/2003	Artem Gennady Evdokimov	9045M2	5050

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THE PROCTER & GAMBLE COMPANY  
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EXAMINER

NASHED, NASHAAT T

ART UNIT PAPER NUMBER

1656

DATE MAILED: 11/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/634,027		EVDOKIMOV ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Nashaat T. Nashed, Ph. D.		1656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 2 and 5-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2 and 5-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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The application has been amended as requested in the communication filed October 16, 2006. Accordingly, claims 1, and 3-4 have been canceled, claims 2 and 5 have been amended, and new claims 6-9 have been added.

Claims 2 and 5-9 are under consideration in this Office action.

This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 CFR 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 CFR 1.821 through 1.825 for the reason(s). In particular, 37 CFR 1.821, which states:

(d) Where the description or claims of a patent application discuss a sequence that is set forth in the "Sequence Listing" in accordance with paragraph (c) of this section, reference must be made to the sequence by use of the sequence identifier, preceded by "SEQ ID NO:" in the text of the description or claims, even if the sequence is also embedded in the text of the description or claims of the patent application.

Thus, each time in the specification the phrase "HPTPbeta" appear to refer to a specific amino acid sequence or nucleic acid in the sequence listing, a sequence identification number should follow the phrase (see for example the Figures descriptions at pages 2 and 3, page 15, line 5, and page 16, line 12).

Applicants have made a commendable effort to perfect their compliance with the sequence rules, but their efforts fail short. The atomic coordinates Tables of Figures 7-304 constitute the disclosure of linear amino acid sequences for an amino acid sequence in the sequence listing. Thus, either the Tables should have a heading with the sequence identifier or the Figures descriptions contain a sequence identifier. Also, the claims are not in compliance with the sequence rules and the sequence identifier must be inserted each time after the phrase "HPTPbeta", wherever it appears.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 2 and 5-9 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The following are the reasons for rejections:

- (a) The clause "a compound that binds to HPTPbeta *in silico*" in claim 2 renders the claim indefinite because the resulting claim does not define the metes and bound of the claimed invention. A compound may bind to a protein/enzyme *in vivo* or *in vitro*, but clearly would not bind *in silico*. For examination purposes only, it is assumed that the clause means "a model of a compound that binds to the model of HPTPbeta *in silico*".

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In response to the above, applicants argue that one of ordinary skill in the art would know the meaning of the phrase and direct the examiner attention to page 5, line 6 of the specification.

Applicants' arguments filed 10/16/06 have been fully considered, but they are found unpersuasive. Nowhere in the paragraph bridging pages 5 and 6 the phrase appears. The language in said paragraph is quite acceptable. Binding a small molecule is a physical event wherein a small molecule binds through specific interaction to a protein. Computer simulation of the binding is a modeling and hypothetical process, and therefore, the language of the claim should reflect this important difference.

- (b) The phrase "ex vivo assay" in claim 5 renders the claim indefinite because the resulting claim does not define the metes and bound of the claimed invention. It is not define by the claim and one of ordinary skill in the art would not know its meaning.

In response to the above, applicants argue that one of ordinary skill in the art would know the meaning of the phrase, e. g., out side of living organism, which include both *in vitro* and *in silico*.

Applicants' arguments filed 10/16/06 have been fully considered, but they are found unpersuasive. Even if the applicants' argument is accepted, the phrase remains indefinite and confusing. While the phrase *in vitro* is already part of the claim, the examiner and one of ordinary skill in the art can't invasion an enzymatic assay *in silico*. Said *in silico* assays are not known in the prior art and the specification does not describe one.

- (c) New claims 6-9 are included in these rejections because they are dependent on rejected claim.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the commercial availability of computers and various software packages listed in

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the specification at 10, line 11 through page 11, line 26 in view of Fachinger *et al.* (IDS reference 4: Oncogene 1999, Vol. 18, pages 1189-1198) for the reasons set forth in the prior Office action mailed 4/13/06.

In response to the above, applicants argue that the examiner improperly characterized the atomic coordinates as merely new data, and that the 3D structure of HPTPbeta catalytic domain have not previously been defined.

Applicants' arguments filed 10/16/06 have been fully considered, but they are found unpersuasive. The examiner agrees with the applicants that the atomic coordinates for the 3D structure of HPTPbeta catalytic domain are novel. Also, applicants agree that the computers and their software are known. So the difference between the prior art which includes motivation to one of ordinary skill in the art to identify modulator of HPTPbeta activity, are the atomic coordinates in Figures 7-304. As indicated in the prior Office action, the atomic coordinates are non-functional descriptive material, which cannot render non-obvious an invention that has otherwise been obvious. See *In re Gulak*, 703 F.2d 1381, 1385 (Fed. Cir. 1983). New claims 6-9 are added to this rejection because they are directed to the same method of rejected claim 2.

No claim is allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

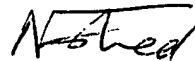
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nashaat T. Nashed, Ph. D. whose telephone number is 571-272-0934. The examiner can normally be reached on MTWTF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen M. Kerr can be reached on 571-272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Nashaat T. Nashed, Ph. D.  
Primary Examiner  
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